

# Cost Growth Benchmark Methodology

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*Nevada Patient Protection Commission*

*May 19, 2021*

# Recap of Preliminary Recommendations

- Total Health Care Expenditures (THCE) should be defined as the allowed amount of claims-based spending from payer to provider, all non-claims-based spending from payer to provider, all member cost-sharing, and the net cost of private health insurance.
- Total Medical Expenses (TME) should be reported as net of pharmacy rebates.

# Recap of Preliminary Recommendations

- The following sources of coverage should be included:
  - Medicare (FFS and Medicare Advantage)
  - Medicaid (FFS and managed care)
  - Commercial (fully- and self-insured)
  - Veterans Health Administration
  - State Correctional Health System
  - Indian Health Service
- Spending incurred for the following people should be included:
  - State residents with in-state providers
  - State residents with out-of-state providers
  - Out-of-state residents with in-state providers

# Design Decisions We Will Be Covering Today

1

Establish Criteria for Selecting an Economic Indicator

Review Options for Economic Indicators to Use as a Basis for Establishing the Cost Growth Benchmark

Compare Methodological Options for the Cost Growth Benchmark

Review Options for Calculating an Indicator to Derive a Cost Growth Benchmark

Discuss Potential Benchmark Values

6

Snapshot of Historical Health Care Cost Growth in Nevada

# Why Use an Economic Indicator?

- The primary reason for establishing a health care cost growth benchmark is that high and rising health care costs have been having a harmful impact on consumers and the non-health care economy.
- Using an economic indicator as the basis of the benchmark would link health care spending growth to state economic wellbeing.
- While all of the other states have elected to consider economic indices when setting their benchmark values, the PPC can consider other means for doing so if it desires.

# Establishing Criteria for Choosing the Economic Indicator

- In a moment we will share economic indicator options to inform the value of the cost growth benchmark.
- Determining which indicator is a matter of preference – there is no objectively right or wrong answer.
- Identifying decision-making criteria may help facilitate the process, however. We therefore offer three criteria suggestions.

# Suggested Criteria

1. Provide a stable, and therefore, predictable target.
2. Rely on independent, objective data sources with transparent calculations.
3. Lower health care spending growth.

# Design Decision: Economic Indicator Criteria



Does the Patient Protection Commission wish to adopt the following criteria for choosing an economic indicator for the benchmark?

1. Provide a stable, and therefore, predictable benchmark.
2. Rely on independent, objective data sources with transparent calculations.
3. Lower health care spending growth.

Does the Commission wish to modify the above criteria or add other criteria for consideration?



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2

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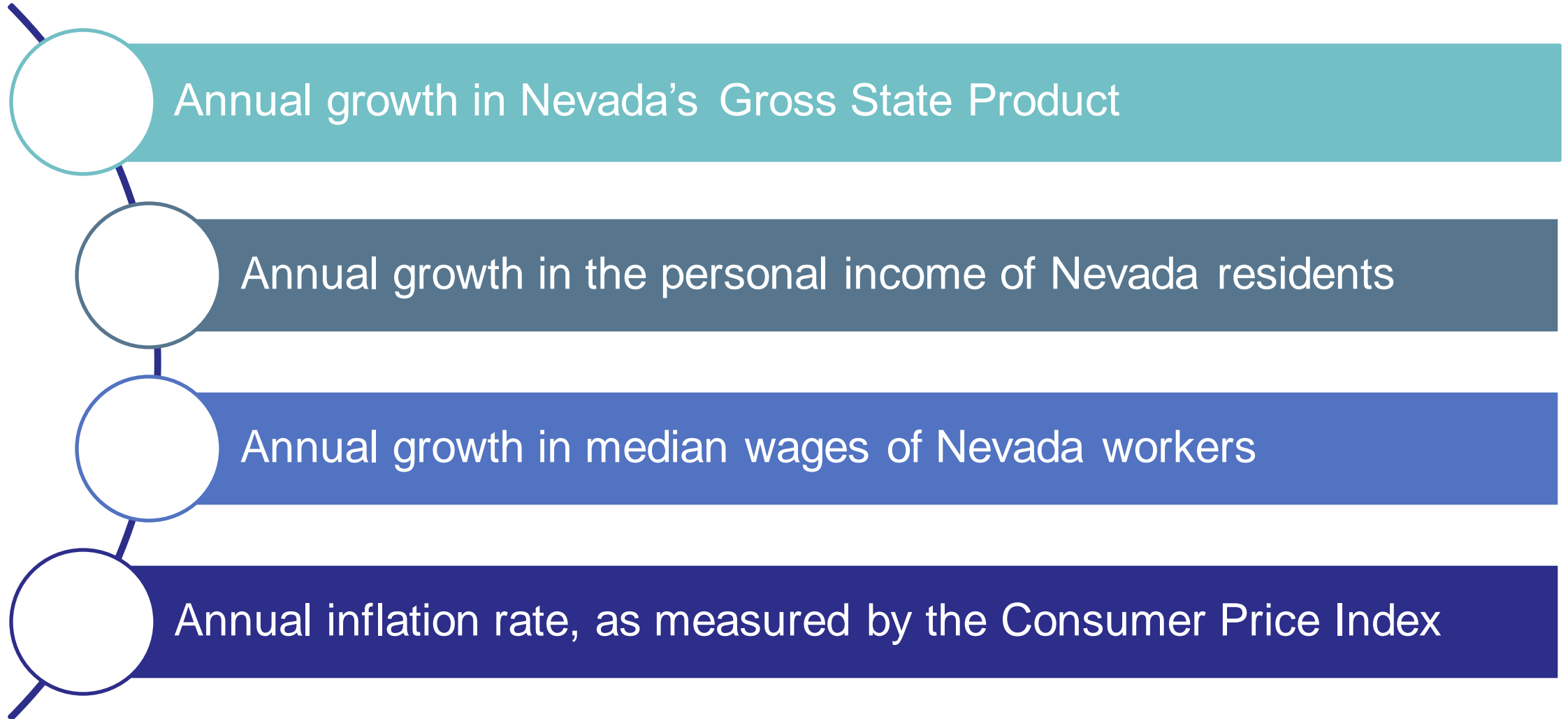
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# Options for the Cost Growth Benchmark



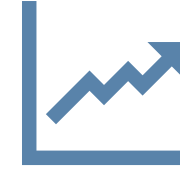
# What Will We Learn About Each of the Indicators?



**What each of these indicators measures in the real world**



**What the “message” would be if the target was pegged to one of these indicators**



**What the annual rate of change has been over the last 20 years (for informational purposes only)**

# Option 1: Rate of Growth in Nevada's Gross State Product

- **Gross State Product (GSP)** is the total value of goods produced and services provided in a state during a defined time period.
- This is the state counterpart to Gross Domestic Product (GDP), which is measured at the national level, with a few methodological differences in how the figures are calculated.

# What It Means to Use the Rate of Growth in Nevada's Economy

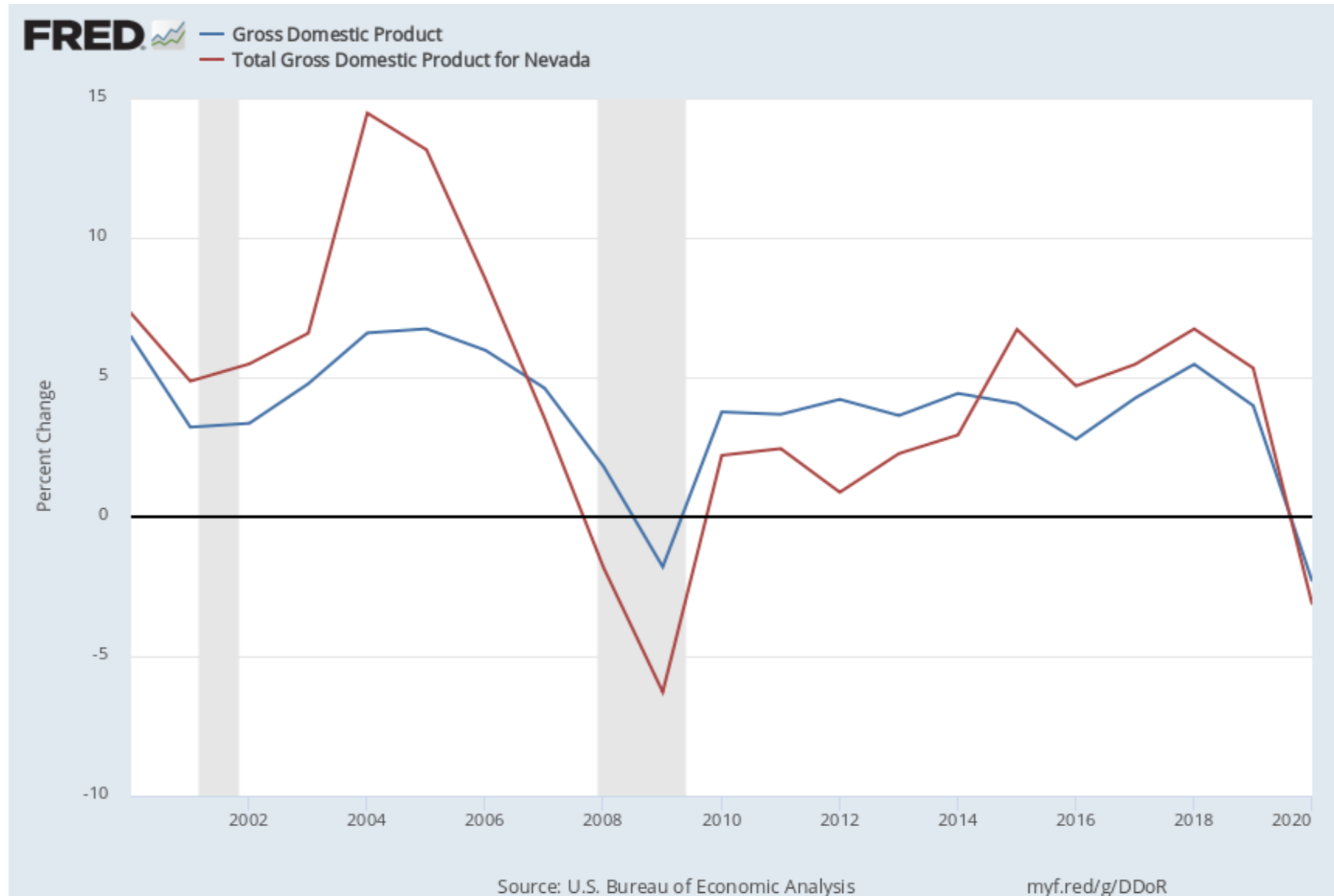


GSP is often considered the main measure and key target of economic policy at all levels of government. The growth in GSP tells us how fast the state's economy is growing.



By tying the benchmark to GSP, we would be recommending an expectation that health care spending should not grow faster than the economy.

# Growth in the Nevada and U.S. Gross State/Domestic Product, 2000-2020 (nominal)



Shaded areas indicate U.S. recessions.

# Option 2: Rate of Growth in Personal Income of Nevada Residents

- **Personal income** is the sum of all payments received by individuals within the state.
- It includes:
  - Earnings such as wages and salaries, proprietor's income (farm and non-farm), and other income (employee benefits)
  - Property income (dividends, rent, and interest)
  - Transfer payments (pensions, Social Security, and other government benefits)
- It does not include some other sources of income, such as capital gains.

# What It Means to Use Rate of Growth in Nevada Residents' Personal Income



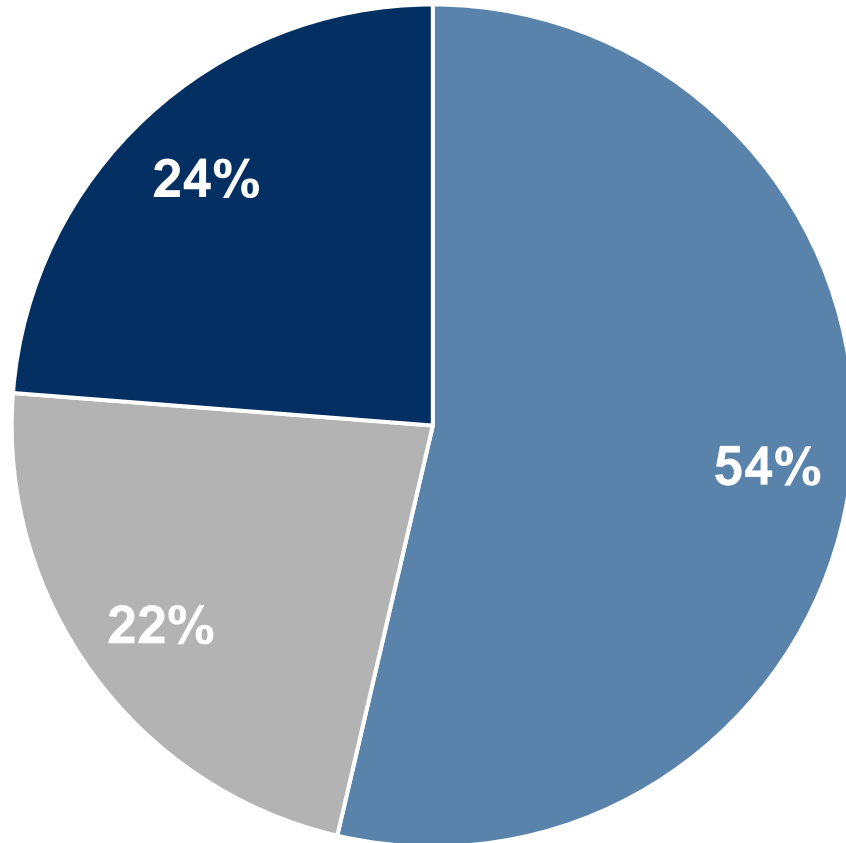
State revenue and spending on government assistance programs depends on personal income. Personal income growth can offer clues to the financial health of Nevada residents and future consumer spending.



By tying the benchmark to personal income growth, we would be recommending health care not grow faster than a measure of consumer financial wellbeing.



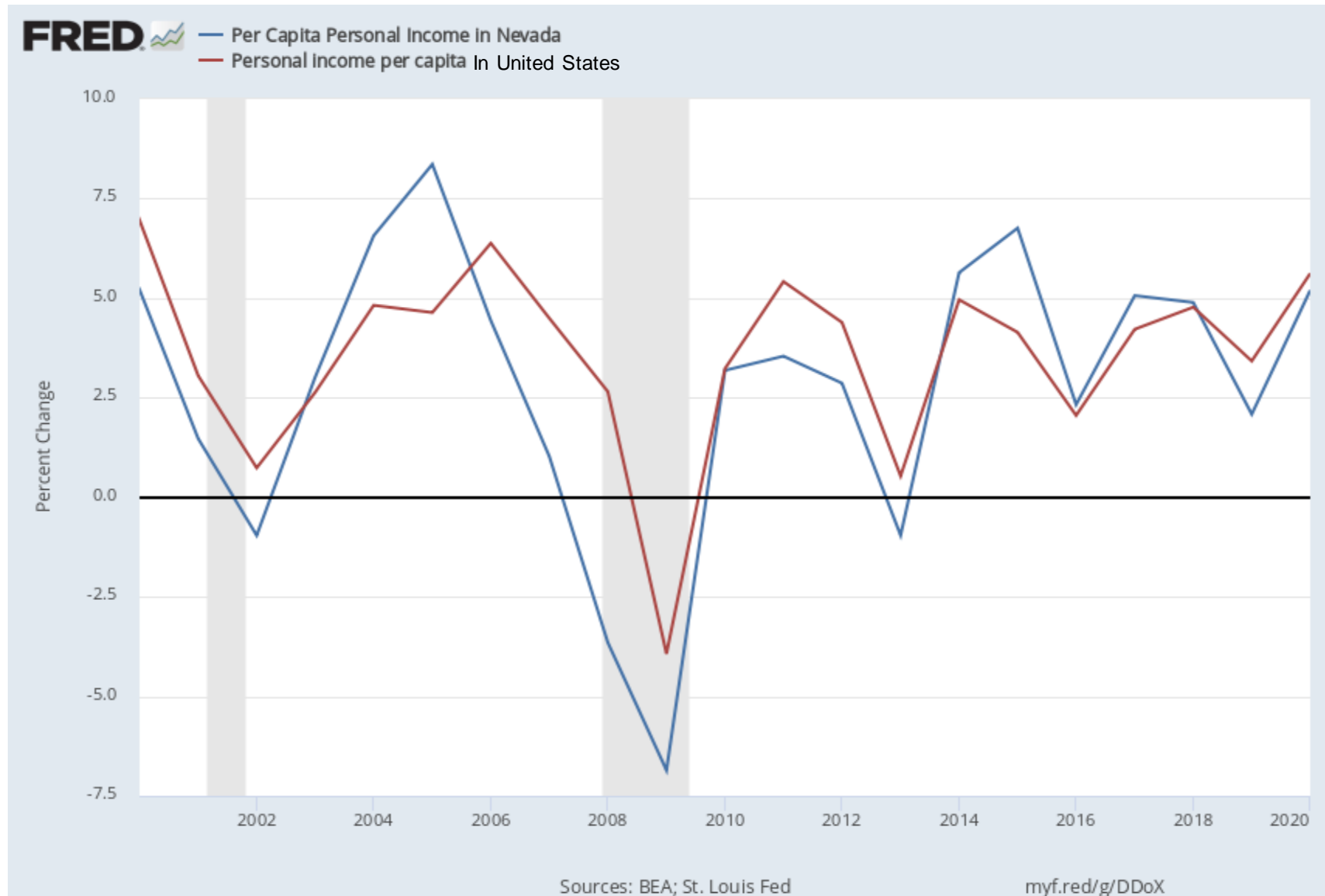
# Personal Income in Nevada by Type<sup>1</sup>



- Net earnings (wages, supplement to wages, and proprietor's income less contributions to social insurance)
- Property income (dividends, interest, and rent)
- Transfer payments (pensions, Social Security, and other government benefits)

<sup>1</sup> Bureau of Economic Analysis, "Personal Income and Employment by Major Component," [https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=30&isuri=1&major\\_area=0&area=32000&year=2020&tableid=56&category=356&area\\_type=0&year\\_end=-1&classification=non-industry&state=0&statistic=-1&yearbegin=-1&unit\\_of\\_measure=levels](https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=30&isuri=1&major_area=0&area=32000&year=2020&tableid=56&category=356&area_type=0&year_end=-1&classification=non-industry&state=0&statistic=-1&yearbegin=-1&unit_of_measure=levels), accessed May 4, 2021.

# Growth in per capita personal income in Nevada and the U.S., 2000-2020 (nominal)



Shaded areas indicate U.S. recessions.

# Option 3: Rate of Growth in Wages of Nevada Residents

- **Wages and salaries (wages)** is compensation received by individuals for work as an employee or as a contractor with an employer.
- It does not capture income that typically accrues to higher income earners, such as capital gains, dividends, rents and interest.
- Wages have grown slower than personal income due to the boost in non-wage income, including health insurance benefits, in the recent past.

# What It Means to Use Rate of Growth in Nevada Residents' Median Wage



Wage growth is a more tangible indicator for most individuals than personal income growth as it more closely represents “take-home pay.”



Setting the benchmark to the growth in Nevada residents' wages implies that health care should not grow faster than Nevada residents' “paychecks.”

# Median Wage by Metropolitan and Nonmetropolitan Areas, 2018

In 2018, median wage in Nevada was **\$38,584**.<sup>1</sup>

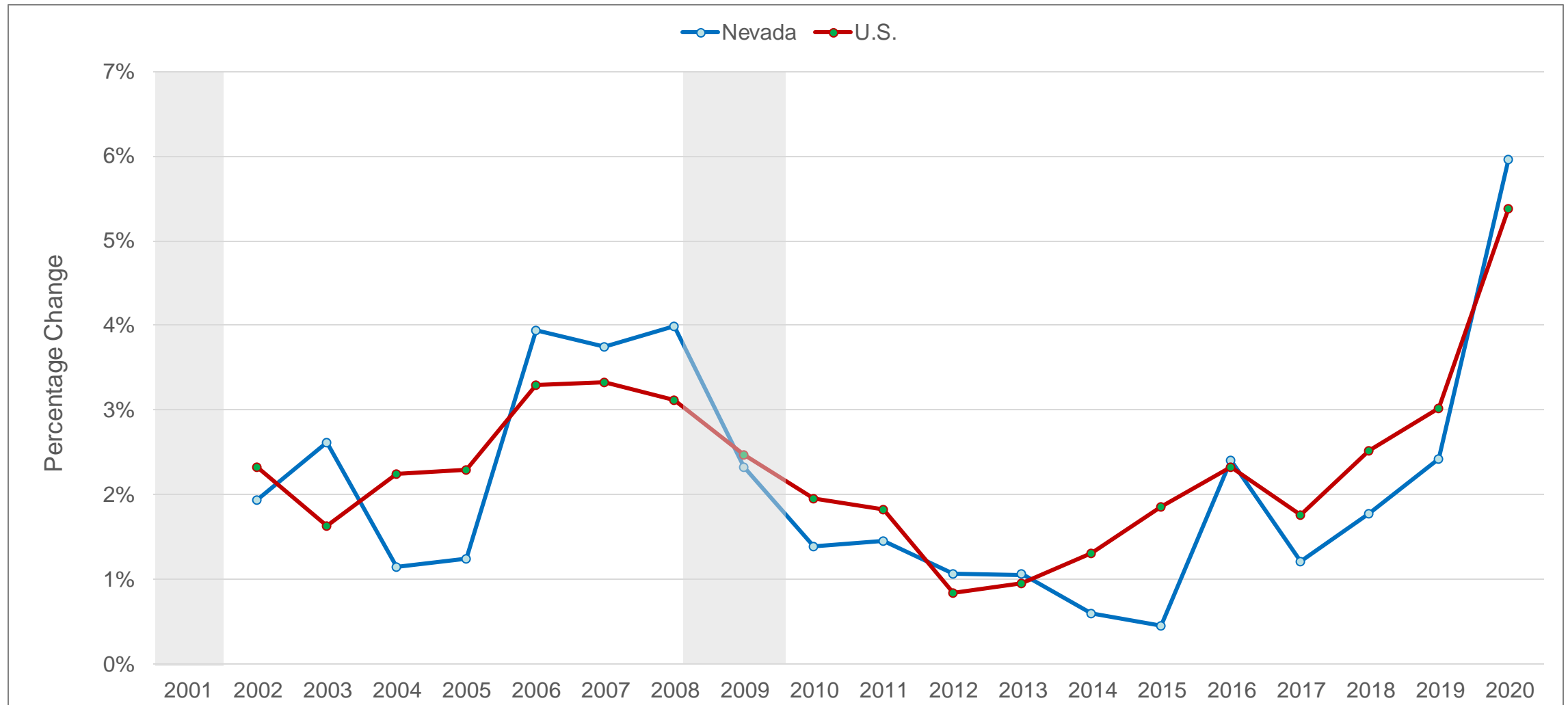
Metropolitan and Nonmetropolitan Areas	Median Wage
Carson City, NV	\$44,557
Nevada nonmetropolitan area	\$42,661
Reno, NV	\$39,811
Las Vegas-Henderson-Paradise, NV	\$37,690

State-Defined Nonmetropolitan Regions	Median Wage <sup>2</sup>
North (Elko, Eureka, Humboldt, Lander, Pershing and White Pine counties)	\$38,958
South (Churchill, Douglas, Esmeralda, Lincoln, Lyon, Mineral and Nye counties)	\$42,078

<sup>1</sup>U.S. Bureau of Labor Statistics. May 2020 State Occupational Employment and Wage Estimates. [https://www.bls.gov/oes/current/oes\\_nv.htm](https://www.bls.gov/oes/current/oes_nv.htm)

<sup>2</sup>Nevada Department of Employment, Training & Rehabilitation. Occupational Employment and Wage Statistics (OEWS). <http://nevadaworkforce.com/OES#>

# Growth in Median Per Worker Wage in Nevada and the U.S., 2002-2020 (nominal)



Shaded areas indicate U.S. recessions.

# Option 4: Rate of Inflation

- Inflation is the process of rising prices that causes the buying power of a dollar to decrease over time.
- Various indices exist to measure different aspects of inflation. One commonly used index is the **Consumer Price Index (CPI)**.

# What is the Consumer Price Index (CPI)?

- The **Consumer Price Index** measures price changes for a “market basket” of retail goods and services purchased out of pocket by consumers.
  - It is most often measured using “CPI All Urban or CPI-U,” which captures the experience of 94% of Americans.
- CPI measures inflation as experienced by consumers in their day-to-day living expenses.



# What It Means to Use Inflation

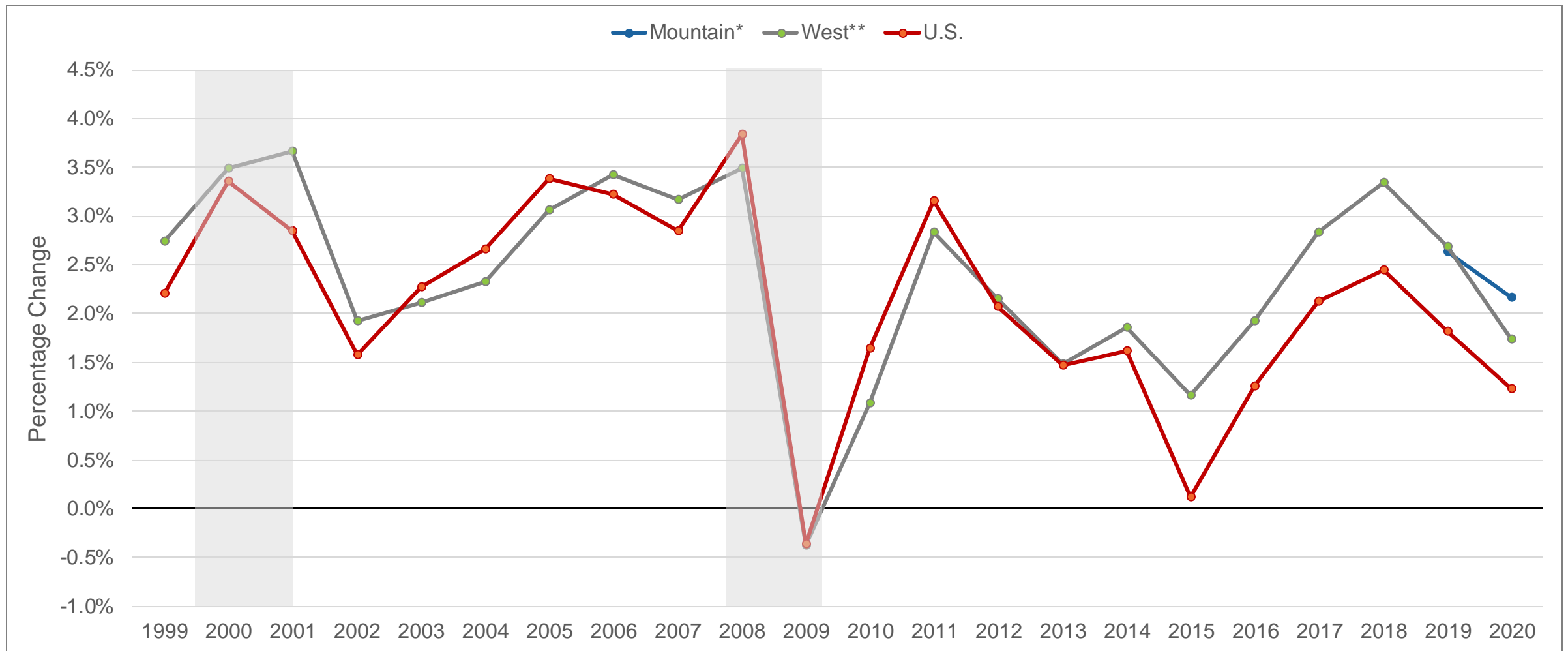


Measures of inflation give a sense of how prices have risen over time, and of consumers' purchasing power.



Setting the benchmark to the rate of inflation signals that health care should not grow faster than the rise in consumer prices.

# Annual Growth in CPI-U, 1999-2020<sup>1</sup>



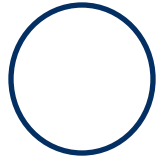
Shaded areas indicate U.S. recessions.

\* The Mountain Division includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming

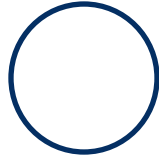
\*\* The West region includes the Mountain and Pacific divisions (Washington, Alaska, Arizona, California, Guam, Hawaii, Idaho, Nevada, and Oregon)

<sup>1</sup> U.S. Department of Labor, Bureau of Labor Statistics, Retrieved from: [https://www.bls.gov/regions/west/data/cpi\\_tables.pdf](https://www.bls.gov/regions/west/data/cpi_tables.pdf), May 4, 2021.

# Design Decisions We Will Be Covering Today



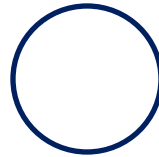
Establish Criteria for Selecting an Economic Indicator



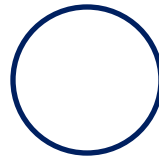
Review Options for Economic Indicators to Use as a Basis for Establishing the Cost Growth Benchmark



Compare Methodological Options for the Cost Growth Benchmark



Review Options for Calculating an Indicator to Derive a Cost Growth Benchmark



Discuss Potential Benchmark Values



Snapshot of Historical Health Care Cost Growth in Nevada

# Approach to Discussion of Options

- We have presented four options for your consideration. Next, we will provide you with pros and cons to each option to help you answer these questions:
  - Do you want to tie the health care cost growth benchmark to any of the aforementioned economic indicators?
  - If so, which one(s), and why?
- We will proceed with the discussion first on a more theoretical basis, focusing on the rationale for tying the benchmark to one of the indicators.

# Approach to Discussion of Options (cont'd)

- How can we make a decision if the criterion of “lowering growth in health care spending” requires us to know the value?
  - After this discussion we will walk you through options for how these economic indicators can be calculated.
  - We will then share a table with values of each economic indicator, and information on historical health care spending growth in the state.
  - We will conclude with a discussion about ways in which the benchmark value can be adjusted should a chosen economic indicator yield a problematic value.

# Discussion of Options: A Reminder of Other State Approaches

- **DE, MA, and RI** tied their health care cost growth benchmarks to Potential Gross State Product.
- **OR** based its decision on historical Gross State Product and median wage data, and in consideration of the growth cap in OR's Medicaid and publicly purchased programs – but did not specifically “tie” the target to an indicator.
- **CT** based its benchmark on a 20/80 blend of Potential Gross State Product and forecasted median income.

# Comparison of Options for Establishing the Benchmark

	Advantages	Disadvantages
<b>1. Gross State Product</b>	Used by most other states with cost growth targets; there is value to having consistent policies.	Abstract economic concept that may not resonate with citizens.
<b>2. Personal Income</b>	Recognizes that income is more than just wages.	Measure grows faster than wages because it accounts for higher earner non-wage income.
<b>3. Median Wage</b>	More consumer-oriented reference to “take-home pay.”	Does not reflect relationship of health care spending growth vis-a-vis the larger economy.
<b>4. Inflation – Consumer Price Index-Urban, West or Mountain Division</b>	Treats health care as another consumer household expense, much as consumers do.	Captures only price and not volume.

# Design Decision: Economic Indicator for the Benchmark



Does the Patient Protection Commission wish to tie the health care cost growth benchmark to any of the aforementioned economic indicators?

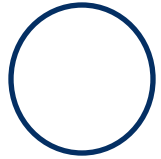
If so, to which one, and why?

- Gross state product
- Personal income
- Median wage
- Inflation – CPI-U

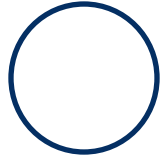
Does the Commission wish to consider other indicators not listed above?



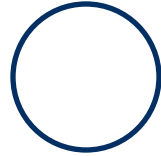
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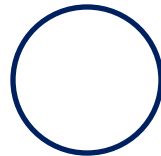
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Discuss Potential Benchmark Values



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# Calculating an Indicator to Derive a Cost Growth Benchmark

- Now that we have discussed the options, we need to discuss how to calculate an economic indicator to derive a cost growth benchmark.
- There are two ways to calculate an economic indicator:
  - Based on historical experience
  - Based on a forecasted projection
- We will weigh each of these options and ask your preferences. Then, we will review a table with the options for continued discussion.

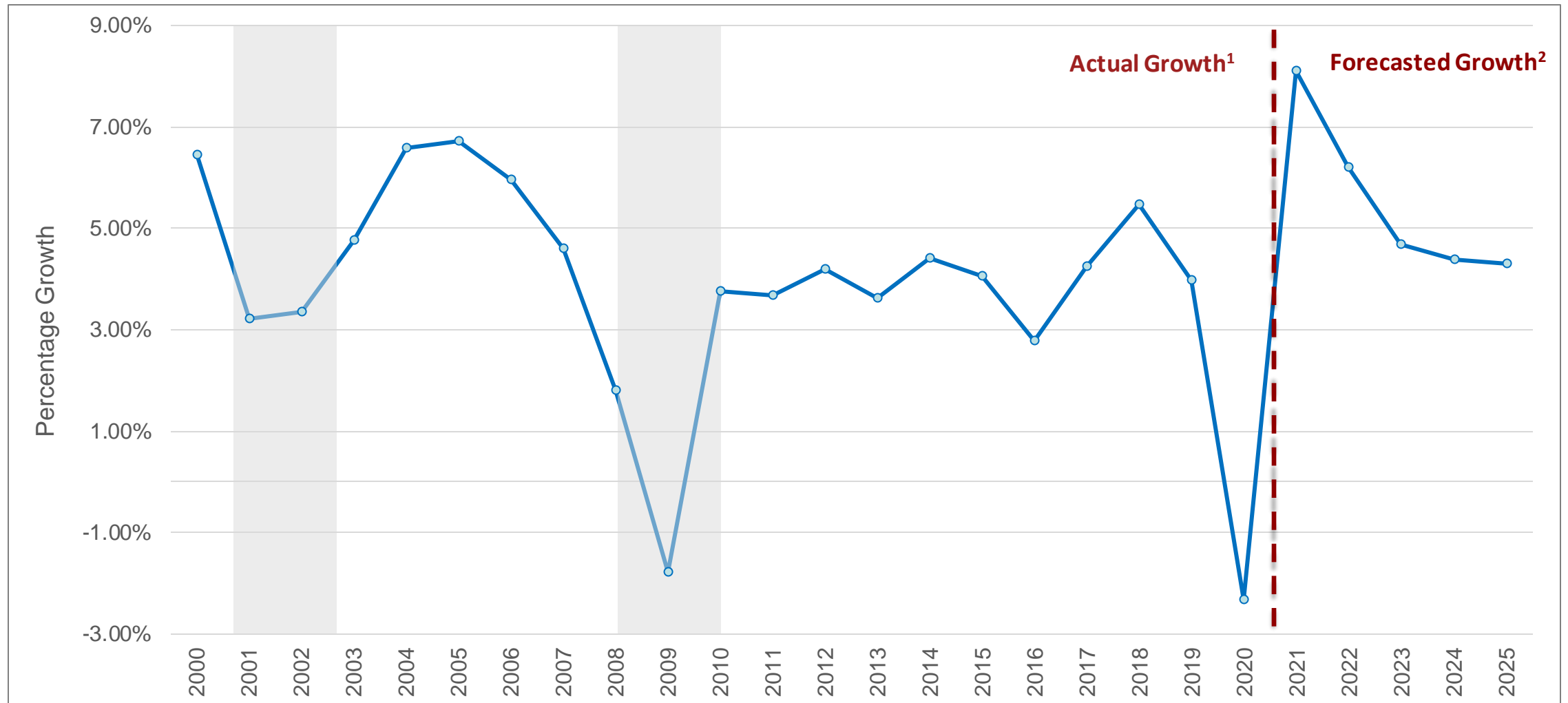
# Calculating a Benchmark Based on Historical Experience

- A benchmark figure could be calculated based on the historical experience of a given economic indicator.
  - 5 years, 10 years, 20 years, etc.
- Using historical data would reflect to varying degrees the volatility of year-over-year changes, including booms and busts.
- Historical figures are a relatively easy mathematical calculation (straight average of growth over prior time periods).

# Calculating a Benchmark Based on a Forecast

- A benchmark figure could also be calculated based on forecasts, which are designed to predict stable future figures.
- There are government forecasts (e.g., Congressional Budget Office) and private forecasts (e.g., Moody's, IHS Markit).
  - The figures and methods of calculation vary.
  - Typically, private forecast methodologies are not available for scrutiny and can vary by the philosophy and outlook of the chief economists at each organization.

# Comparison of Historical vs. Forecast for U.S. GDP, 2000-2025 (Nominal)



Shaded areas indicate U.S. recessions.

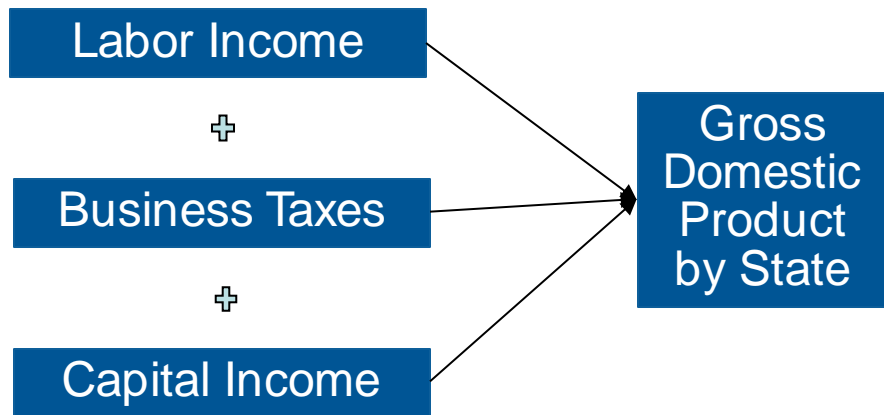
<sup>1</sup> U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/GDP>, May 4, 2021

<sup>2</sup> Washington State Economic and Revenue Forecast Council, "Economic Forecast Calendar Year Summary Tables," <https://erfc.wa.gov/forecasts/economic-forecast>, May 4, 2021.

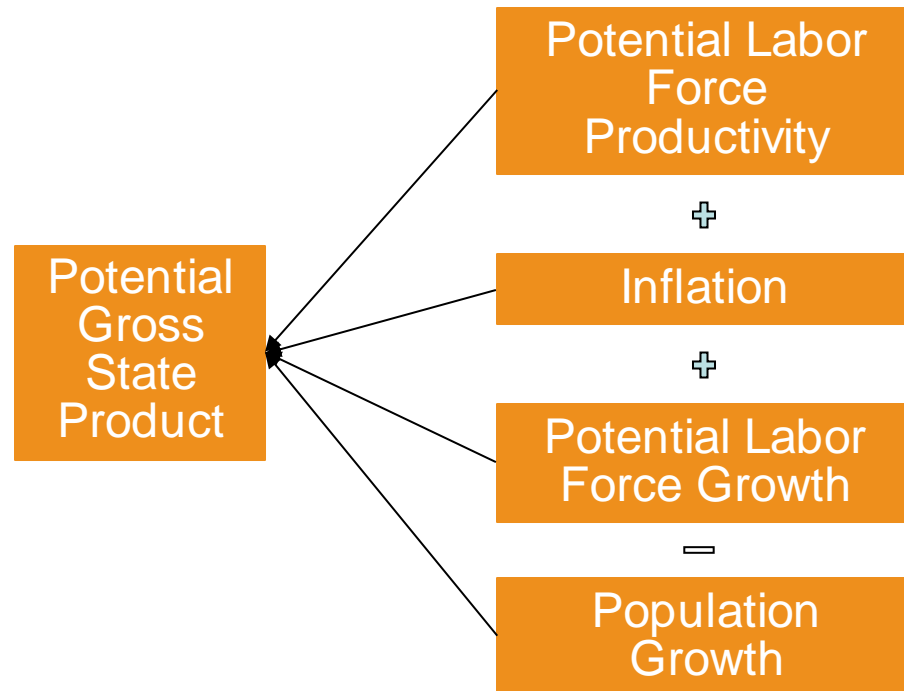
# Forecasting Gross State Product

- DE, MA, RI, and CT (in part) all use a forecasted measure of nominal Potential Gross State Product (PGSP).
- PGSP measures the long-run average growth rate of a state economy, excluding fluctuations that may occur due to the business cycle. It is forecasted for year 5 to year 10 in the future, and is calculated on a per capita basis.
- This is the only economic indicator discussed that has a publicly available forecasted calculation, but is not forecasted Gross State Product, per se.

# GSP and PGSP Are Different Measures and Therefore Forecasts Will Be Different



GSP can be calculated using historical averages, or forecasted. If GSP is forecasted, it will not equal PGSP.



By definition, PGSP is a forecast.

# Advantages and Disadvantages of Using Historical vs. Forecasted Values

	Historical	Forecasted
<b>Advantages</b>	<ul style="list-style-type: none"><li>• Easy to calculate.</li><li>• Reflects actual experience.</li></ul>	<ul style="list-style-type: none"><li>• Smooths out historical variability and provides more stability and predictability.</li></ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"><li>• Highly variable, reflecting economic booms and busts.</li><li>• Unclear rationale for which time period to choose.</li></ul>	<ul style="list-style-type: none"><li>• Forecasts are predictions and may be incorrect.</li><li>• Longer-term forecasts will need to rely on data from forecasting organizations whose methodologies are opaque.</li></ul>
<b>State Use</b>	<ul style="list-style-type: none"><li>• OR</li></ul>	<ul style="list-style-type: none"><li>• CT, DE, MA and RI</li></ul>



# Design Decision: Historical vs. Forecasted Values



Does the Patient Protection Commission wish to use historical or forecasted values of the selected economic indicator to derive benchmark values?

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# Historical and Forecasted Values

- Historical averages were calculated by taking 20-year straight averages of annual percent growth.
  - 20 years includes a sufficient number of business cycles to reduce the influence of any one particular boom or bust period.
  - Using the 10-year average would have overvalued the Great Recession.
  - Data to calculate the 20-year historical average are only available to 2018 or 2019 and don't yet reflect the COVID-19 pandemic's effects.
- The forecasted values for all but PGSP were obtained from the Nevada Governor's Office of Economic Development.
- PGSP was calculated by project staff using the aforementioned formula.

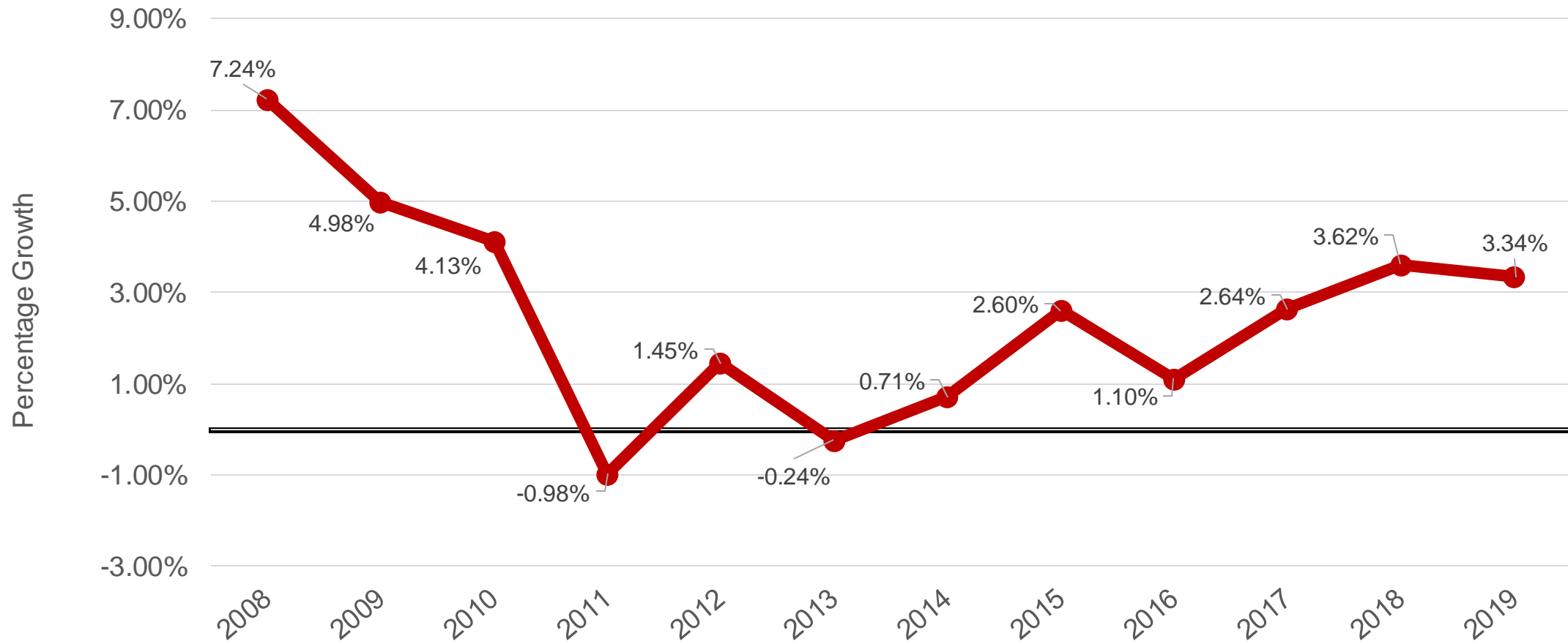
# Comparison of Historical and Forecasted Values of Potential Indicators

Economic Indicator	Historical (20-year lookback)	Forecast (2021-2025)
Gross State Product and Potential Gross State Product	<b>4.3%</b> (2001-2020)	<b>3.5%</b> (2021-2025)
Personal Income	<b>2.7%</b> (2001-2020)	<b>1.9%</b> (2021-2025)
Median Wage	<b>2.2%</b> (2002-2020)	<b>2.3%</b> (2021-2025)
Consumer Price Index-Urban, West	<b>2.3%</b> (2001-2020)	<b>2.4%</b> (2021-2025)

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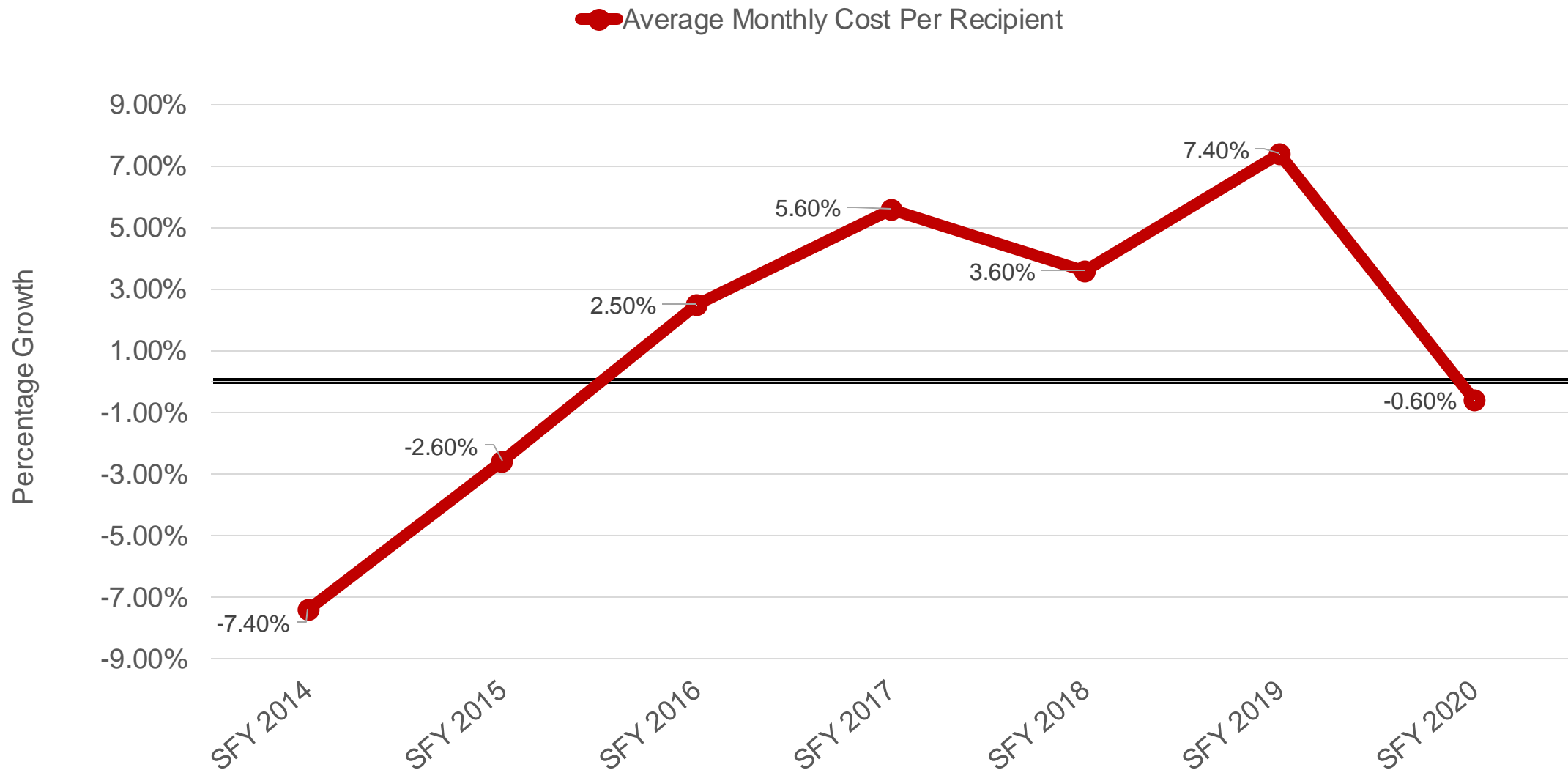
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# NV Medicare Per Capita Growth Rate of Healthcare Spending<sup>1</sup>



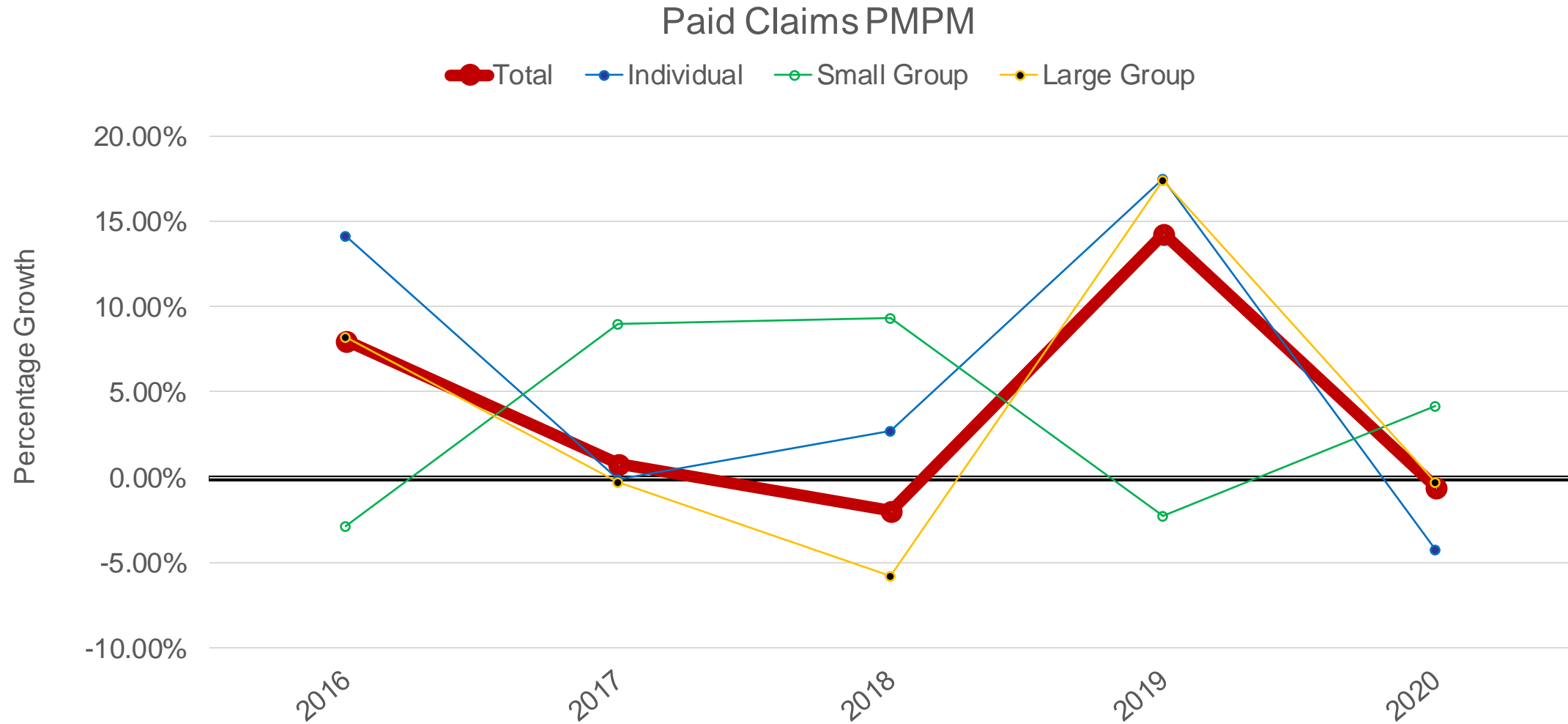
<sup>1</sup> Centers for Medicare & Medicaid Services, Medicare Geographic Variation, "State/County Report – All Beneficiaries," [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF), Accessed May 19, 2021.

# NV Medicaid Per Capita Growth Rate of Healthcare Spending<sup>1</sup>



<sup>1</sup> Retrieved by Nevada Division of Health Care Financing and Policy from Data Warehouse of Nevada (DAWN), April 1, 2021.

# NV Commercial Per Capita Growth Rate of Health Care Spending<sup>1</sup>



<sup>1</sup> Retrieved by Nevada Division of Insurance from iSite's Health Care Exhibit, April 7, 2021.



# Average Annual Growth Rate for Medicaid, Medicare, and Commercial

Payer Type	Average Annual Growth	Since 2016
Medicare	<b>2.6%</b> (2008-2019)	<b>2.7%</b> (2016-2019)
Medicaid	<b>1.2%</b> (2014-2020)	<b>3.7%</b> (2016-2020)
Commercial	<b>4.1%</b> (2016-2020)	<b>4.1%</b> (2016-2020)

# Design Decision: Benchmark Methodology and Value



What benchmark value and methodology does the Patient Protection Commission wish to use?

Economic Indicator	Historical (20-year lookback)	Forecast (2021-2025)
Gross State Product and Potential Gross State Product	<b>4.3%</b> (2001-2020)	<b>3.5%</b> (2021-2025)
Personal Income	<b>2.7%</b> (2001-2020)	<b>1.9%</b> (2021-2025)
Median Wage	<b>2.2%</b> (2002-2020)	<b>2.3%</b> (2021-2025)
Consumer Price Index-Urban, West	<b>2.3%</b> (2001-2020)	<b>2.4%</b> (2021-2025)